Disclaimer

The views expressed herein are those of the presenter and do not reflect the official policy or position of the Department of Defense.
AFPMB Mission Tasks

- Develop and recommend policy and guidance
- Coordinate exchange of information
- Prevent adverse effects of pests and disease on DoD installations and operations
- Ensure environmentally sound and effective integrated pest management (IPM) programs
- Gate keeper for stock listed pest management equipment & pesticides
- Research Requirements / Capability Gap Analysis
The Armed Forces Pest Management Board Directorate

Director

Deputy Director

Operations Division
- Contingency Liaison Officer
  - ACLO
  - Environmental Biologist

DWFP Program Manager

Research Liaison Officer

Information Services Division
- Information Liaison Officer
  - Deputy, ISD
  - Technical Info. Specialist

Support (IT, Budget, Admin)

AFPMB Council & 9 Standing Committees

SECDEF
USD (AT&L)
OASD (EI&E)
DASD (ESOH)
PM and NR Policy Overlap

- **DoDI 4150.07** – DoD Pest Management Program
  - Mandates compliance with EO and Service regulations
  - Requires installations to implement IPM plan
  - DoD Pesticide Applicators Certification - Most pesticides are used for IS and Security
  - For IS – Follow EO 13112 / 13751 and new Nat’l IS Mgt Plan

- **DoDI 4715.03** - Natural Resources Conservation Program
  - IS are managed via INRMP implementation and 4150.07
  - IPM Plan as INRMP Supplement

- **Service regulations** (Army, Navy, Air Force, Marines)
  - Each Service has additional IS guidance and regulations

- **DTR 4500.9R Part V** – Ag cleaning & Inspection
  - USDA Animal and Plant Health Inspection Service
  - Required Clean up and inspection of returning military equipment

- **EO 13112 / 13751** – Invasive Species (IS)

- **Sikes Act:**
  - Integrated Natural Resources Management Plan (INRMP) development & implementation
  - Regulatory: DoI (FWS) and State Fish & Game

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DoD IS Resources  [www.dodinvasives.org](http://www.dodinvasives.org)
DoD MoMs - Pesticide Usage

MoM #2: Maintain a 52% Reduction* in Pesticide Usage Compared to FY 1993 Baseline

Baseline for FY93-03 = 892 K lbs a.i.
Baseline for FY04-10 = 399 K lbs a.i.
Baseline for FY11-14 = 425 K lbs a.i.

* A 52% reduction from FY1993 baseline will be 48% “of the Baseline”

Bars indicate “% of the Baseline”
Amount used by each component in comparison to total amount used
Deployed War-Fighter Protection Program (DWFP)

- **Purpose:** Develop and validate improved methods to protect deployed personnel from threats posed by mosquitoes and other vectors.

- **Thrust areas:**
  - Novel insecticides
  - Improved application and control technology
  - Improved personal protective technology to prevent insect bites

- Started in 2002 to offset loss of public health pesticides, application tools and counter spread of insecticide resistance.

- Annual Funding at ~$5M/year (PE 0603115/Project: 830A)
  - ~$3 M to USDA Agricultural Research Service
  - ~$1.7 for **competitive proposals** (grants up to $250K/yr for up to 3 yrs)
**Novel Insecticide and Products**

- Bite resistant textiles for clothing / uniforms
- Permethrin replacement for treated clothing / uniforms
- Next Generation Topical Repellents (2-3X over DEET)
- Spatial / Area repellents for rooms and personnel
- New Sprayer technology
  - Compressed Air silent backpack sprayer
  - New ULV sprayers and nozzle technology
  - Electostatic sprayers
- Attractive targeted sugar baits
- Autodissemination and lethal ovitrap stations
- Molecular insecticides (RNAi)
- New EPA Reg ULV Insecticide (deltamethrin, Zenivex)
- Smart phone apps (Vectorspray® and Aerial Spray)
AFPMB DVEPs

DVEPs

- Bolivia
- Caribbean
- Central Europe
- Colombia
- Commonwealth of Independent States
  Includes Afghanistan, Iran, Kazakhstan, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan
- East Asia
  Includes China, Hong Kong, Macau, Japan, Mongolia, North Korea, South Korea, and Taiwan
- Ecuador
- Haiti
- Honduras
- Koreans (Medical Threats in the Korean Peninsula)
- Middle East
  Includes Bahrain, Cyprus, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen.
- North Africa
  Includes Algeria, Canary Islands, Egypt, Libya, Morocco, and Tunisia.
- Peru
- Somalia
- South Central Asia
  Includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.
- South East Asia
  Includes Brunei-Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam
- Thailand
- Former Yugoslav Republics
Typical AFPMB DVEP

Regional Disease Vector Ecology Profile
East Asia

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AFPMB Technical Guides (TG’s)

- TG 2 - Integrated Pest Management in Child Development Centers and Schools, November 2016
- TG 3 (CAC access only) - Feral Animal Risk Mitigation (FARM) in Operational Areas, January 2017
- TG 6 - Delousing Procedures for the Control of Louse-borne Disease During Contingency Operations, November 2011
- TG 7 (CAC access only) - Installation Pesticide Security, August 2003
- TG 11 - Hydrogen Phosphide Fumigation with Aluminum Phosphide, March 2013
- TG 13 - Dispersal of Ultra Low Volume (ULV) Insecticides by Cold Aerosol and Thermal Fog Ground Application Equipment, July 2011
- TG 14 - Personal Protective Equipment for Pest Management Personnel, April 2011
- TG 15 - Pesticide Spill Prevention and Management, August 2009
- TG 16 - Pesticide Fires: Prevention, Control, and Cleanup
- TG 17 (CAC access only) - Military Handbook - Design of Pest Management Facilities, August 2009
- TG 20 - Pest Management Operations in Medical Treatment Facilities, December 2012
- TG 21 - Pesticide Disposal Guide for Pest Control Shops
- TG 22 - Guidelines for Testing Experimental Pesticides on DoD Property, June 2001
- TG 24 (CAC access only) - Contingency Pest Management Guide, September 2012
- TG 26 - Tick-Borne Diseases: Vector Surveillance and Control, November 2012
- TG 27 - Stored-Product Pest Monitoring Methods, November 2015
- TG 29 - Integrated Pest Management in and around Buildings, August 2009
- TG 30 - Filth Flies: Significance, Surveillance and Control in Contingency Operations, October 2011
- TG 34 - Bee Resource Manual with emphasis on The Africanized Honey Bee, November 2013
- TG 36 - Personal Protective Measures Against Insects and Other Arthropods of Military Significance, November 2015
- TG 37 (CAC access only) - Integrated Management of Stray Animals on Military Installations, May 2012
- TG 38 - Protecting Meal, Ready-to-Eat Rations (MREs) and Other Subsistence During Storage, November 2015
- TG 40 (CAC access only) - Methods for Trapping and Sampling Small Mammals for Virologic Testing, September 1995 (Reviewed March 2013)
- TG 41 - Protection from Rodent-borne Diseases with special emphasis on occupational exposure to hantavirus, December 2013
- TG 42 - Self-Help Integrated Pest Management, April 2015
- TG 44 - Bed Bugs - Importance, Biology, and Control Strategies, March 2012 (Supplemental Information)
- TG 45 (CAC access only) - Storage and Display of Retail Pesticides, November 2012
- TG 46 (CAC access only) - DoD Entomological Operational Risk Assessments, April 2011
- TG 47 - Aedes Mosquito Vector Control, March 2016
- TG 48 (CAC access only) - Contingency Pest and Vector Surveillance, November 2013
AFPMB Zika Preparation Pubs

**Zika Virus Preparation**

- Aircraft Disinsection Training - CAC Access only
- Aircraft Disinsection Supplemental - CAC Access only
- Aedes Control in Preparation for Zika
- Aedes Vector Control Pocket Guide
- Contingency Pest Management Guide - CAC Access Only
- Special Collection on Aedes Aegypti and Zika Virus research
- Strategy for Control of Zika Virus Transmitting Mosquitoes on Military Installations - DoD
- Vector Surveillance Log
- Zika Virus Fact Sheet - APHC
- Zika Resources
AFPMB Technical Guides (TG’s)

Armed Forces Pest Management Board
Technical Guide No. 47

Aedes Mosquito Vector Control

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Teaching CDs

Interactive Program for Teaching Adult Mosquito Morphology

The Armed Forces Pest Management Board (AFPMB) announces the availability of a new DVD entitled “Interactive Program for Teaching Adult Mosquito Morphology.” This educational teaching tool is designed to provide a self-paced course of instruction that will enable medical personnel to confidently identify adult mosquitoes in the absence of a professional mosquito taxonomist. The program comprises four parts: a tutorial in adult mosquito morphology; student identification practice using 40 specimens; a glossary of adult mosquito morphology; and a collection of over 400 diagrams of adult mosquitoes to assist the user in learning and identification. The program was developed by Dr. George W. Schultz (Commander, U.S. Navy (Retired)), with assistance from AFPMB Staff Members Dr. Richard G. Robbins and Mr. David W. Hill.

Interactive Program for Teaching Larval Mosquito Morphology

The Information Services Division announces the availability of a new product entitled Interactive Program for Teaching Larval Mosquito Morphology. This educational teaching tool, distributed on DVD, is designed to provide a self-paced course of instruction that will enable medical personnel to confidently identify mosquito larvae in the absence of a professional mosquito taxonomist. The program comprises four parts: a tutorial in larval mosquito morphology, student identification practice using 24 specimens, a glossary of larval mosquito morphology, and a collection of over 800 chelae/ax diagrams to assist the user in learning and identification. The program was developed by CDR George W. Schultz, with assistance from Dr. Richard G. Robbins and Mr. David W. Hill.

Interactive Program for Teaching Tick Morphology

The Information Services Division announces the availability of a new CD entitled Interactive Program for Teaching Tick Morphology. This educational teaching tool is designed to provide a self-paced course of instruction that will enable medical personnel to confidently identify ticks in the absence of a professional tick taxonomist. The program comprises five parts: a tutorial in tick morphology, demonstrations in identifying ticks by an expert, student identification practice sessions, a glossary of tick morphology, and a collection of tick identification keys. The program was compiled by CDR George W. Schultz, Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences; Dr. Richard G. Robbins, ISD; and Mr. David W. Hill, AFPMB.
Questions?

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